1:Stanford U. S-4, 5 1956 AF16 SW China AF16

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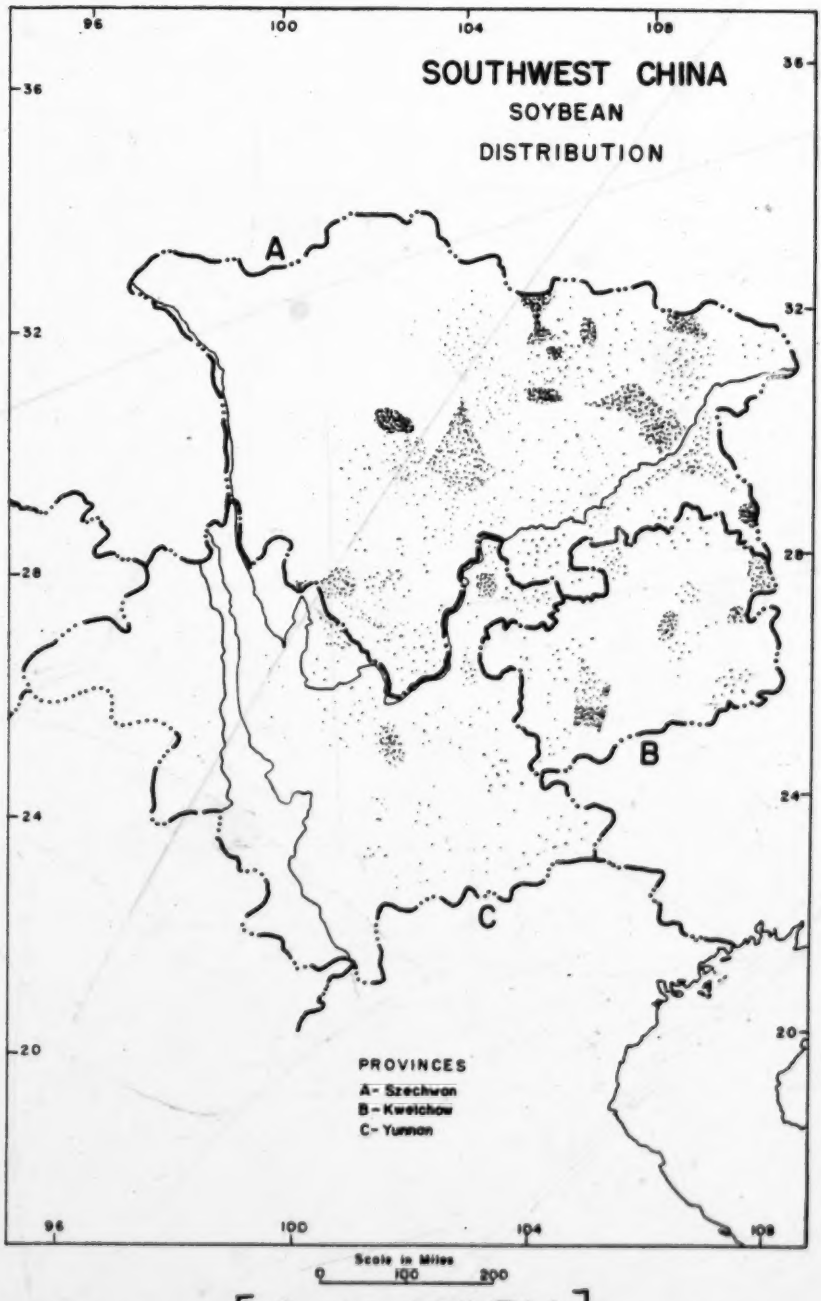


[facing p. 745 (c)]

248 If we use 1949 as the base year (100),
433 the average yield per unit of land was 134 in 1952, 156 in 1953, and 164 in 1954 and 1955.

D. Other Agricultural Products

244 Southwest China's production of edible
433 oil (excluding soybean oil) surpasses the majority of regions in China, and the output of oil from rapeseeds ranks first on the Mainland. It was estimated that the total production of rapeseed oil in Szechwan Province alone amounted to 108,000 metric tons (118,800 tons) in 1955, an increase of 28 per cent over the amount produced in the preceding year.[20]

249 In addition to the production of rapeseed,
245 Szechwan Province is also the chief producer
433 of sugar cane and oranges. Tremendous quantities of sugar cane are grown on the plains of Chengtu; the output of sugar cane in 1955 was 1,180,000 tons more than the output in 1949, according to one report.[21] The
245 oranges and tangerines grown in Szechwan
433 fill all local needs and are exported to other parts of China as well as to the Soviet Union

20. China Daily News, New York, Aug. 31, 1955.

21. Wen-hui Pao [Wen-hui Daily], Hong Kong, July 25, 1955.

5: Daviet G-5 (1894-1900) 1909 AF16 Southwest China AF16



792 ordinarily dirty and so were the monks, but they certainly impressed me with their sincerity much more than the ordinary temple priest, who is often a great blackguard, and is usually held in no respect by his fellow-countrymen.

The descent on the eastern side of the pass was as bad as the ascent had been, and we had to go down 6000 feet to the village of Ssŭ-ling-kang before we could find any shelter or forage. We got in just after dark, our mules dead beat, having taken ten hours to do the march of fourteen miles.

The next day, the 16th December, we crossed the Salween at Mêng-ku ferry at an elevation of 2,550 feet, a drop of 8000 feet from the range we had crossed the day before. The river is here 100 yards wide, running with a current which precludes all idea of navigation. In some places the hills close right in on both sides, in other places there is half a mile or a mile width of rice cultivation. The valley has the warmer climate and denser vegetation of the Shan States—quite different from all the neighbouring [244] plains of Yün-nan. It is a mild enough climate to grow chillies, and it also produces persimmons which are sold dried like figs.

563 The population of this part of the country is small but varied. On the hills are Lo-los, Li-sos, and Chinese, while in the valley are Shans, and also Chinamen who most of them come from the neighbouring province of Ssŭ-ch'uan, the Yünnanese finding the place too hot and feverish. I do not think that the Shans extend up the Salween valley very much higher than this, for from all accounts one soon gets into a country ruled by semi-independent Li-so chiefs.

Four more marches through a very hilly country brought us to the top of the range which divides the Salween from its tributary, the Yung-ch'ang river. The road crosses it at 8,400 feet, and from the top is a fine view of range after range of beautiful mountains, the snow-capped Ts'ang 346 Shan, which overlooks Ta-li Fu, being clearly visible. We descended into the Yung-ch'ang plain and slept in a remarkable temple called the Shui-fu-ssŭ or Sleeping Buddha Temple. It is picturesquely placed at the foot of a jungle-covered spur with a piece of water in front of it. The inner shrine is a large natural cave, in which is the image

5: Davies G-5 (1894-1900) 1909 AF16 Southwest China AF16



course of the Ya-lung can be traced from the top of this pass. Just where it makes its great bend to the north, its further progress southward is barred by an enormous mountain mass rising almost sheer from the river to a height of thousands of feet. The country in that direction is under the Hsi-fan chief of Kua-pieh[1], who is nominally subordinate to the Yën-yüan Hsien mandarin.

A steep descent to a little valley and another 1000 feet of uphill brought us to the Lo-lo village of Ma-huang-kou at 10,300 feet. The villagers were at first somewhat taken aback by the appearance of such curious-looking people, and were not much inclined to sell us anything. However the appearance of the chief's wife, a large proportioned lady of some 40 years, altered all this. She immediately turned out all the villagers, ordered them to sweep a place clean for my tent, and to bring us anything they had to sell. Her subjects soon became as friendly as they had previously been suspicious.

This country is so very poor that it is by no means easy to get enough to eat even for such a small party as we were. Corn of any sort was scarce and the mules came off badly. I was more fortunate, as I found the people here grew potatoes—a luxury indeed to the traveller in China. It is usually only among hill tribes that one is occasionally able to get this vegetable. The Chinese do not seem to appreciate it, though it grows well in the few places where it is cultivated. I remember getting excellent potatoes in Tung-ch'uan Fu and T'ung-hai Hsien. They were, I believe, originally introduced into China by French missionaries, and in Yün-nan they are called *yang yü*, the foreign yam.

To illustrate the varied population of this country I may mention that for five days we had now slept among a different tribe each night—Mu-nia Hsi-fan, Chinese, Lo-p'u Hsi-fan, Miao-tzŭ, and Lo-lo. Each of these people's language is unintelligible to all the others. The *lingua franca* of the country here is still Chinese, though further west Tibetan was much more generally known.

[1] This place is described by Dr R. Logan Jack in *The Back Blocks of China*.

7: Hu K-5 (1934- ) 1946 AF16 Southwest China AF16



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most important food crops, constituting 8 per cent of the total food supply for the population here, particularly in the northern and eastern parts of the Basin. Its juicy shoots are also widely used as feed for pig-rearing in the hilly areas northwest of Chengtu Plain.

Corn is the staple summer crop in the more hilly areas which do not hold reservoir water. It is also the principal crop in areas where swift streams debouch upon the plain and where the soils are too sandy to hold water for paddy. Moreover, wherever the slopes are too steep or the gullies too narrow, and the soils are too thin for other food crops, a few stands of corn are always found. Many times the slopes where the corn is planted are so steep that one wonders how the farmers ever manage to sow and reap the crop. With the exception of a few districts like Si-Chung and Yung-chang, which for reasons unknown produce very little corn, corn is cultivated in nearly every district of the Basin. This is particularly so in the southern peripheral areas of the Basin where several crops may be harvested yearly.

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c) Potatoes.--The third most important summer crop of the Basin is the potato (Solanum tuberosum). It normally occupies about 6,000,000 mow, or about 6 per cent of the total crop area. On account of the high yield, the Basin leads all China in potato production, and has an annual output of 56,000,000 piculs (Fig. 35). Potatoes, like corn, are also of American origin and were introduced into the Basin only about seventy years ago.[1] They are now universally cultivated throughout the Basin, especially on the upper hill terraces. More than any other province in China (with the possible exception of Kwangtung), potatoes here serve as a very important source of human food, constituting about 9 per cent of the total food supply, particularly in the northwestern and southern hilly areas of the Basin. Sometimes they are also used as feed for pigs. It is reported that on account of the extraordinarily high starch content in the potatoes produced here, an increasing portion of the crop is being used in the manufacture of alcohol and other fuel supplies for war-use during recent years.

d) Kaoliang and other summer crops.--The other important common summer food crops in the Basin include kaoliang (Sorghum Vulgare) and a great variety of soy beans (Glycine hispida). Each

[1] Gazetteers of Ping Shan, I, 8.

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•244 occupies about 4,000,000 mow, or 4 per cent of the total crop land. Kaoliang, sometimes called false millet, is a staple dry crop on hilly lands. It is noted for its special capacity to be without water for a long time (longer than corn) without drying to death. The choice of these two crops by farmers for a certain [273] area often depends on this point. Besides being used widely for human consumption, as well as for livestock feed, kaoliang is used mainly (between 70 and 80 per cent of the total crop) for the manufacture of wine, the famous kaoliang wine. This last use proves to be particularly advantageous to the farmers because wine can be transported to far distant markets when the sale of bulky grains, owing to prohibitive transportation costs, is difficult.

243 e) Wheat.--The most important winter food crop is wheat (Triticum Sativum). It normally occupies about 15,000,000 mow, or 17 per cent of the total crop area, and the Basin has an annual output of 44,000,000 piculs (Fig. 35). The Basin is the fifth largest wheat producer in all China. With the exception of the Chien-chiang district (which for reasons unknown does not produce wheat), wheat is produced as a winter food crop in nearly all parts of the Basin, particularly in the districts around Chengtu Plain. The wheat prefers the more clayey soils of the Basin, and gives a particularly good yield.

The crop matures generally in 150 to 170 days. In most parts of the Basin, the field is seeded in the middle of October and the harvest takes place in the early part of May, depending upon the latitudinal position, as well as the topography of the area. Next to rice, wheat is the most important food crop of the Basin, contributing 12 per cent of the total food supply. It is eaten in the form of "mien" (noodles) or in other forms of dumplings.

249 f) Rape seed.--The Basin leads all China, both in area and in total annual production of rape (Brassica juncea; a winter crop). Normally it occupies an area of 11,000,000 mow, or about 10 per cent of the total crop area, and the annual output is 15,000,000 piculs[1] (Fig. 35). From the rape seed, oil is extracted for cooking and many other purposes. The seed cakes also furnish

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[1]Bureau of Central Agricultural Research, Agricultural Statistics (1939), p. 97.

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Prior to the Republic (1912) the export of medicinal herbs, together with silk and tung-oil, formed the backbone of the export trade of the Basin. Herbs alone generally accounted for between 15 and 20 million dollars yearly. But recently, on account of the constant warfare and heavy taxation, as well as the increasing competition of western drugs, the herb trade has reached a low point; in 1936 the total value of herbs exported amounted only to some 7 million dollars. 249 278

Chungking is normally the biggest center for transhipment of herbs to outside markets. It is not only the point of convergence of the herb products of the six main producing areas, but also herbs from northern Kweichou and southern Shensi (by the Chialing and Chi waterways, respectively), are shipped via Chungking, on their way to lower Yangtse markets. Thus, for a long time, Chungking has been known as the "jackpot" of the herb trade of the Far East. The principal domestic markets for the Basin's herbs include Kiangsu, Chekiang, Kwang-tung, Honan, Hunan, and Hupeh provinces, whereas the chief foreign buyers are Japan, French Indo-China, and France.

d) Cho Tsai or pickled (fermented) vegetable.--Cho Tsai, or pickled vegetable, is another unique product of Szechuan Basin, which is the only region in China where this food is produced. Cho Tsai has long been regarded as a great delicacy and a tasty seasoning for cooking in various parts of China, particularly in the lower Yangtse Valley and the North China Plain, as well as in Japan and countries of the South Sea Islands. Large quantities of this delicacy (some two or three million dollars' worth) are exported yearly to these areas from the Basin. 244

The principal producing areas of Cho Tsai are in the east of the Basin, particularly in Pei-Ling, Feng-tu, Chang-shou, Chiang-pah, and Pa-hsien districts (Fig. 37). The products from Pei-Ling and Lo-Chih (Chiang-pah) are especially famous.

This vegetable, locally known as Ching Tsai, being a species of chard, thrives well in a wide range of soil conditions. It requires good drainage. The plant is ordinarily seeded in September after the reaping of the summer crops; and the harvest takes place some time around January or February. During its growing season it requires a humid, mild climate. In many localities it forms a very satisfactory rotation crop with rice.

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251 The process of preparing Cho Tsai is interesting. It is dried (by solar radiation), specially treated with salt and other ingredients (somewhat fermented), seasoned with pepper, and packed in air-tight tanks for export. Like Sunkist oranges from California in the United States, this unique product, "Szechuan Cho Tsai," has been for years the best advertisement for the name of "Szechuan" in many parts of the Far East.

### 4. Livestock Production and Special Animal Products

231 This term, livestock production or animal husbandry, has a special meaning as used in oriental agriculture. Livestock production here in the Basin, like in many other parts of China, is concerned only with the quick-growing food stock, the species that are easily cared for and do not require special feed. These normally include pigs, chickens, ducks, and some geese. While some cattle and sheep are raised here, they are seldom used for dairy products as in the West.

According to the recent report of the Bureau of Central Agricultural Research, for every one hundred farming families in Szechuan Basin there are 40 water buffalos, 17 head of cattle, 2 horses, 39 goats, 2 sheep, 169 pigs, 366 chickens, 149 ducks, and 20 geese.[1]

237 a) Bristles.--In the western commercial world, bristles, like silk and tea, during the past years has always been associated with China. The principal producer of this well known Chinese product is Szechuan Basin. Normally the Basin supplies about one-fourth of the total export of all Chinese bristles, including 15,000 piculs of black and 4,000 piculs of white bristles. Among all the outstanding exports from the Basin, bristles is the only one that has always maintained a predominant position. It now alone comprises about one-fourth of the total value of the export trade of the Basin.[2]

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[1] Report of the Bureau of Central Agricultural Research (1939), p. 42.

[2] The export of bristles has jumped from eighth to fourth place in China's foreign trade since 1939, next only to raw silk, egg products, and tungsten. Szechuan Basin has been the largest producer, contributing about 40 per cent of the total export of this product (cf. J. H. Huang, "An Analysis of Foreign Trade of Bristles of Szechuan," Journal of Foreign Trade, March, 1941).